Application No.: 10/615,665

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

<u>Listing of Claims</u>:

1. (Previously Presented) An imageable element comprising:

a substrate; and

a layer of an imageable composition over the substrate;

in which:

the imageable composition comprises:

a photothermal conversion material, and

particles of a polyurethane polymer;

the polyurethane polymer comprises urethane linkages in the main chain;

the polyurethane polymer does not comprise side chain urethane groups;

the polyurethane polymer is prepared by reaction of a diisocyanate and a dihydroxy compound, and

the dihydroxy compound comprises about 1-25% of a carboxy functional diol or a mixture of carboxy functional diols.

2. Canceled

- 3. (Previously Presented) The element of claim 1 in which the dihydroxy compound comprises about 3-15% of the carboxy functional diol or mixture of carboxy functional diols, about 0-50% of an aromatic diol or mixture of aromatic diols, and about 35-97% of an aliphatic diol or mixture of aliphatic diols.
 - 4. (Original) The element of claim 1 in which the polyurethane polymer

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comprises blocking groups.

5. (Original) The element of claim 1 in which the polyurethane polymer does not comprise blocking groups.

- 6. (Original) The element of claim 1 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 80% to about 99% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant or mixture of surfactants; and about 0.5% to about 20% of the infrared absorber or mixture of infrared absorbers.
- 7. (Previously Presented) The element of claim 6 in which the dihydroxy compound comprises about 3-15% of the carboxy functional diol or mixture of carboxy functional diols, about 0-50% of an aromatic diol or mixture of aromatic diols, and about 35-97% of an aliphatic diol or mixture of aliphatic diols.
- 8. (Original) The element of claim 7 in which the imageable layer comprises: about 85% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.1% to about 1% of the surfactant or mixture of surfactants; and about 1% to about 15% of the infrared absorber or mixture of infrared absorbers; and the polyurethane particles have a diameter of 0.01-0.5 micrometers.
- 9. (Original) The element of claim 1 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
- 10. (Currently Amended) The element of claim 9 in which the imageable layer comprises: about 60% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant-of or mixture of surfactants; about 0.5% to 20% of the infrared absorber or mixture of infrared absorbers; and about 3% to 30% of the water soluble polymer or mixture of water soluble polymers.
- 11. (Previously Presented) The element of claim 10 in which the dihydroxy compound comprises about 3-15% of the carboxy functional diol or mixture of

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carboxy functional diols, about 0-50% of an aromatic diol or mixture of aromatic diols, and about 35-97% of an aliphatic diol or mixture of aliphatic diols.

- 12. (Currently Amended) The element of claim 11 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 70% to about 90% of the polyurethane particles, based on the dry weight of the particles; about 0.1% to about 1% of the surfactant-of or mixture of surfactants; about 1% to about 15% of the infrared absorber or mixture of infrared absorbers; and about 5% to about 20% of the water soluble polymer or mixture of water soluble polymers; and the polyurethane particles have a diameter of 0.01-0.5 micrometers.
- 13. (Original) The element of claim 1 in which at least one end of the polyurethane polymer is either a blocking group or an amine group.
- 14. (Original) The element of claim 1 in which both ends of the polyurethane polymer are each either a blocking group or an amine group.

15. Canceled

- 16. (Previously Presented) The element of claim 14 in which the dihydroxy compound comprises about 3-15% of a carboxy functional diol or mixture of carboxy functional diols, about 0-50% of an aromatic diol or mixture of aromatic diols, and about 35-97% of an aliphatic diol or mixture of aliphatic diols.
- 17. (Original) The element of claim 16 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
- 18. (Original) The element of claim 1 in which the polyurethane polymer is not crosslinked.
- 19. (Original) The element of claim 18 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
 - 20. (Previously Presented) A method for forming an image, the method

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comprising the steps of:

(a) thermally imaging an imageable element to produce an imaged imageable element comprising imaged regions and unimaged regions in the layer of imageable composition, the imageable element comprising:

a substrate; and

a layer of an imageable composition over the substrate;

in which:

the imageable composition comprises:

a photothermal conversion material, and

particles of a polyurethane polymer;

the polyurethane polymer comprises urethane linkages in the main chain;

the polyurethane polymer does not comprise side chain urethane groups;

the polyurethane polymer is prepared by reaction of a diisocyanate and a dihydroxy compound, and

the dihydroxy compound comprises about 1-25% of a carboxy functional diol or a mixture of carboxy functional diols;

(b) developing the imaged imageable element by applying fountain solution and lithographic ink to the layer of imageable composition, removing the unimaged regions, and forming the image.

21-24. Canceled

25. (Original) The method of claim 20 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 80% to about 99% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant or mixture of surfactants; and about 0.5% to

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about 20% of the infrared absorber or mixture of infrared absorbers.

26. (Previously Presented) The method of claim 25 in which the dihydroxy compound comprises about 3-15% of the carboxy functional diol or mixture of carboxy functional diols, about 0-50% of an aromatic diol or mixture of aromatic diols, and about 35-97% of an aliphatic diol or a mixture of aliphatic diols.

- 27. (Original) The method of claim 26 in which the imageable layer comprises: about 85% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.1% to about 1% of the surfactant or mixture of surfactants; and about 1% to about 15% of the infrared absorber or mixture of infrared absorbers; and the polyurethane particles have a diameter of 0.01-0.5 micrometers.
- 28. (Original) The method of claim 20 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
- 29. (Currently Amended) The method of claim 28 in which the imageable layer comprises: about 60% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant-of_or mixture of surfactants; about 0.5% to 20% of the infrared absorber or mixture of infrared absorbers; and about 3% to 30% of the water soluble polymer or mixture of water soluble polymers.
- 30. (Previously Presented) The method of claim 29 in which the dihydroxy compound comprises about 3-15% of the carboxy functional diol or mixture of carboxy functional diols, about 0-50% of an aromatic diol or mixture of aromatic diols, and about 35-97% of an aliphatic diol or mixture of aliphatic diols.
- 31. (Currently Amended) The method of claim 30 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 70% to about 90% of the polyurethane particles, based on the dry weight of the particles; about 0.1% to about 1% of the surfactant-of_or mixture of surfactants; about 1% to about 15% of the infrared absorber or mixture of infrared absorbers; and about 5%

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to about 20% of the water soluble polymer or mixture of water soluble polymers; and the polyurethane particles have a diameter of 0.01-0.5 micrometers.

- 32. (Original) The method of claim 31 additionally comprising, after step (b),
- (c) applying a fountain solution and then a lithographic ink to the image, forming an ink image, and transferring the ink image to a receiver.
 - 33. (Canceled)
- 34. (Original) The method of claim 20 in which the polyurethane polymer is not crosslinked.
- 35. (Original) The method of claim 34 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
- 36. (Previously Presented) The element of claim 7 in which the carboxyl functional diol or mixture of carboxyl functional diols is selected from the group consisting of 2,2-bis(hydroxymethyl) propionic acid, 2,2-dimethylol propanoic acid), 2,2-bis(2-hydroxyethyl) propionic acid, 2,2-bis(3-hydroxypropyl) propionic acid, bis(hydroxymethyl)acetic acid, bis(4-hydroxyphenyl)acetic acid, 2,2-bis(hydroxymethyl) butyric acid, 2,2-bis(hydroxymethyl) pentanoic acid, tartaric acid, and mixtures thereof.
 - 37. (Previously Presented) An imageable element comprising:
 - a substrate; and
 - a layer of an imageable composition over the substrate;

in which:

the imageable composition comprises:

a photothermal conversion material, and

particles of a polyurethane polymer;

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the polyurethane polymer comprises urethane linkages in the main chain; the polyurethane polymer does not comprise side chain urethane groups; the particles consist essentially of the polyurethane polymer;

the polyurethane polymer is prepared by reaction of a diisocyanate and a dihydroxy compound; and

the dihydroxy compound comprises about 1-25% of a carboxy functional diol or a mixture of carboxy functional diols.

- 38. (Previously Presented) The element of claim 37 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 80% to about 99% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant or mixture of surfactants; and about 0.5% to about 20% of the infrared absorber or mixture of infrared absorbers.
- 39. (Previously Presented) The element of claim 38 in which the imageable layer comprises: about 85% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.1% to about 1% of the surfactant or mixture of surfactants; and about 1% to about 15% of the infrared absorber or mixture of infrared absorbers; and the polyurethane particles have a diameter of 0.01-0.5 micrometers.
- 40. (Previously Presented) The element of claim 37 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
- 41. (Currently Amended) The element of claim 40 in which the imageable layer comprises: about 60% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant of mixture of surfactants; about 0.5% to 20% of the infrared absorber or mixture of infrared absorbers; and about 3% to 30% of the water soluble polymer or mixture of water soluble polymers.

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42. (Currently Amended) The element of claim 41 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 70% to about 90% of the polyurethane particles, based on the dry weight of the particles; about 0.1% to about 1% of the surfactant-of or mixture of surfactants; about 1% to about 15% of the infrared absorber or mixture of infrared absorbers; and about 5% to about 20% of the water soluble polymer or mixture of water soluble polymers; and the polyurethane particles have a diameter of 0.01-0.5 micrometers.

- 43. (Previously Presented) The element of claim 37 in which the polyurethane polymer is not crosslinked.
 - 44. Canceled
- 45. (Previously Presented) A method for forming an image, the method comprising the steps of:
- (a) thermally imaging an imageable element to produce an imaged imageable element comprising imaged regions and unimaged regions in the layer of imageable composition, the imageable element comprising:

a substrate; and

a layer of an imageable composition over the substrate;

in which:

the imageable composition comprises:

a photothermal conversion material, and

particles of a polyurethane polymer;

the polyurethane polymer comprises urethane linkages in the main chain;

the polyurethane polymer does not comprise side chain urethane groups;

the particles consist essentially of the polyurethane polymer;

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the polyurethane polymer is prepared by reaction of a diisocyanate and a dihydroxy compound; and

the dihydroxy compound comprises about 1-25% of a carboxy functional diol or a mixture of carboxy functional diols;

- (b) developing the imaged imageable element by applying fountain solution and lithographic ink to the layer of imageable composition, removing the unimaged regions, and forming the image.
- 46. (Previously Presented) The method of claim 45 in which the imageable layer comprises, based on the dry weight of the imageable layer: about 80% to about 99% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant or mixture of surfactants; and about 0.5% to about 20% of the infrared absorber or mixture of infrared absorbers.
- 47. (Previously Presented) The method of claim 45 in which the imageable layer additionally comprises a water soluble polymer or a mixture of water soluble polymers.
- 48. (Currently Amended) The method of claim 47 in which the imageable layer comprises: about 60% to about 95% of the polyurethane particles, based on the dry weight of the particles; about 0.01% to about 5% of a surfactant-of or mixture of surfactants; about 0.5% to 20% of the infrared absorber or mixture of infrared absorbers; and about 3% to 30% of the water soluble polymer or mixture of water soluble polymers.